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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,754	11/03/2003	Jens Debler	TRW(REPA)6842	4260

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EXAMINER

MCCREARY, LEONARD

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,754

Applicant(s)

DEBLER ET AL.

Examiner

Leonard J. McCreary, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 Feb 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 5-10, 21 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11-20, and 23-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/23/04, 8/26/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-4, 11-20, and 23-27 in the reply filed on 16 February 2006 is acknowledged. Claims 5-10 and 21-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 64, 186. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or

"New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11-20 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 11-14, the phrase "gill-like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "-like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). Re claims 18 and 20, claim 18 recites the limitation "said connecting tube" in lines 1-2. Claim 20 recites the limitation "said detachable connection." There is insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 11, 16-20, and 23-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 3,817,552 to Knight, IV et al. in view of U.S. 2003/0197358 to Hawthorn et al. Knight discloses an occupant restraint system for use in the dashboard of a vehicle comprising the following:

- a. A gas bag module and a vehicle body part 16 including a ventilation channel 28 for ventilating a front windscreen, said ventilation channel being arranged between said front windscreen 12 and said gas bag module, said gas bag module having a gas bag 66 folded to form a gas bag package and a gas lance 68 through which gas can be directed into said gas bag, said gas bag module having an ejection opening 64 through which said gas bag can be ejected on inflation (claim 1.)
- b. The gas lance 68 is arranged in a vicinity of said ejection opening 64 (claim 4.)
- c. The gas lance 68 has ends and a center and is provided with slotted outflow openings 70 (claim 11.)
- d. The gas bag module has a common gas generator 122 for driver's and passenger's sides (claim 16.)
- e. A connecting tube 130 is arranged between said gas lance 68 and said gas generator 122 (claim 17.)

- f. The connecting tube 130 is connected in said center of said gas lance 68 (claim 18.)

Knight teaches a generically folded gas bag. He does not teach a specific folding including first and second partial packages, with only the first partial package between the lance and the ejection opening. Hawthorn discloses an air bag module assembly for use in an automotive dash board generally below a windshield characterized in that:

- g. Re claim 1, the gas bag package comprises first and second partial packages, of which said first partial package 170 is arranged closer to the ejection opening, whereas said second partial package 172 is arranged further away with respect to said ejection opening, and the inflator 136 is arranged in the gas bag module 132 such that only the first partial package is situated between the ejection opening and the inflator (Fig. 4.)
- h. Re claim 2, the first partial package 170 is smaller than the second partial package 172 (Fig. 4.)
- i. Re claim 3, the first partial package 170 is folded in a first way and the second package 172 is folded in a second way (Fig. 4.)

Hawthorn teaches that such an arrangement is useful, because it allows the airbag to deploy the first portion of the gas bag substantially immediately and completely to thus more quickly protect the vehicle occupant (paragraphs 0024-0026.) In view of the teachings of Hawthorn, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the occupant restraint system of Knight to include the specific gas bag folding configuration and arrangement so as to deploy the first portion

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of the gas bag substantially immediately and completely to thus more quickly protect the vehicle occupant. Re claims 19 and 20 and the detachable connection, Knight does not teach that the gas generator is connected to the gas lance with a detachable connection. It is old and well known in the art to join two gas communication members with a detachable connection such as national pipe thread connectors or with a quick-disconnect clip coupler. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the occupant restraint device of Knight to include detachable connections as are well known in the art so as to join gas communication members inexpensively with readily available couplers. Re claims 23-26, Knight discloses the claimed invention except he does not explicitly teach the dimensions of the gas bag module, though Fig. 1 makes it apparent that the dimensions claimed in the current application would be reasonably applied to Knight's apparatus. It would have been obvious to one of ordinary skill in the art at the time of invention to select the claimed gas bag module dimensions, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Re claims 23 and 24, it is noted that the length of the gas bag module measured along an extent of the gas lance 68 amounts to at least 260 mm and 480mm, respectively, since the lance runs substantially the full width of the dashboard (Fig. 1,) and one having ordinary skill in the art would understand the width of a vehicle to include at least these dimensions.

7. Claims 12-14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 3,817,552 to Knight, IV et al. in view of U.S. 2003/0197358 to Hawthorn et al. as applied to claims 1 and 11 above, and further in view of U.S. 3,602,526 to Brawn. The disclosure of Knight is discussed above. Knight does not teach the direction of gas flow through the lance. Re claim 12, Brawn teaches a vehicle safety assembly having inflatable confinement comprising a diffuser 38 and louver gas outlets 40 which are aligned such that gas flowing out from the diffuser flows towards the ends of the diffuser (Fig. 5) so as to reduce the frontal velocity of the confinement as it expands (abstract.) It would have been obvious to one of ordinary skill in the art at the time of invention to modify the occupant restraint system of Knight to include a gas lance as taught by Brawn wherein the gas openings are aligned such that gas flowing out from the lance flows towards the ends of the diffuser so as to reduce the frontal velocity of the confinement as it expands and thus reduce the likelihood of injury to the occupant caused by excessively forceful gas bag deployment. Re claims 13-14, Brawn does not teach the claimed directions of gas outflow. It would have been obvious to one of ordinary skill in the art at the time of invention to reorient the louvers so they are aligned such that gas flowing out from the diffuser flows towards the center of the diffuser or the gas is swirled, since such orientations would allow tailoring of the gas flow to a variety of vehicle dimensions. Additionally, it would have been an obvious matter of design choice to orient the louvers in any of the claimed direction since applicant has not disclosed that the particular orientations claimed solves any stated problem or is for any

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particular purpose and it appears that the invention would perform equally well with gas flow outlets oriented to discharge in any direction.

8. Claim 15 stands rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 3,817,552 to Knight, IV et al. in view of U.S. 2003/0197358 to Hawthorn et al. as applied to claim 1 above, and further in view of U.S. 5,992,880 to Cuddihy et al. The disclosure of Knight is discussed above. Knight does not teach separate gas generators for driver's and passenger's sides. Cuddihy discloses a vehicle airbag deactivation switch circuit comprising separate airbag systems (38, 42,) including gas generators. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the occupant restraint device of Knight to include separate gas generators as taught by Cuddihy so as to allow deactivation of the passenger airbag system when a child occupies the passenger seat or the seat is unoccupied (column 4, lines 7-11.)

9. Claim 27 stands rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 3,817,552 to Knight, IV et al. in view of U.S. 2003/0197358 to Hawthorn et al. as applied to claim 1 above, and further in view of U.S. 6,457,738 to Labrie et al. The teachings of Knight are discussed above. Knight does not teach a specific gas bag volume. Labrie discloses an inflatable restraint apparatus comprising a gas bag with a volume of 110-140 liters (column 20, lines 9-30.) It would have been obvious to one of ordinary skill in the art at the time of invention to modify the occupant restraint system of

Knight to include a gas bag with a volume of 110-140 liters so as to adequately protect the vehicle occupant without requiring an unreasonably large amount of inflation fluid from the gas generator.

Conclusion

10. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:


a. U.S. 6,193,271 to Shimane discloses an automotive airbag device comprising a gas bag module with two partial packages, characterized in that the first partial package is between the inflator and the ejection opening, the first partial package is smaller than the second, and the first and second partial packages are folded differently.

b. U.S. 4,842,300 to Ziomek et al. discloses a vehicle airbag module comprising two partial packages, characterized in that only the first partial package is between the inflator and the ejection opening, the first partial package is smaller than the second, and the first and second partial packages are folded differently (Fig. 16.)


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. McCreary, Jr. whose telephone number is 571-272-8766. The examiner can normally be reached on 0700-1700 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Leonard J. McCreary, Jr.
Examiner
Art Unit 3616

**RUTHILAN
PRIMARY EXAMINER**


3/31/06